

## **Equipment for Education, Training, and Research in Advanced Instrumentation and Control at The Ohio State University**

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Program: General Scientific Infrastructure

## **ABSTRACT:**

This project is to acquire equipment and instrumentation that will be integrated into the existing infrastructure of the Nuclear Engineering Program (NEP) at The Ohio State University (OSU) to improve our capabilities in research and education. The proposed equipment will improve the research and education capabilities of our program in the areas of advanced instrumentation and control, including instrument for sensor evaluation and material preparation and sensor tests that need to be conducted in inert atmosphere, license expansion for a nuclear power plant simulator, and instrumentation for an existing high-temperature fluoride salt test facility. The proposed equipment will strengthen the current infrastructure of instrumentation and control at OSU and to invest hardware on equipment to instrumentation-related research to sensor evaluation and advanced thermal hydraulics. The success of this proposal would improve the OSU NEP's ability to attract high-quality students who are interested in nuclear energy-related sensor and instrumentation development. It would also enhance the educational experience of all OSU Nuclear Engineering graduate students for their formal academic education through the enhancement of their research by using the related equipment.